CYPTUS TOHONO COYP.

SFUND RECORDS CTR
2216162

| 1   | JOEL GROSS  |                 | FILED Y LODGED                              |  |  |  |
|-----|---|-----------------|---|--|--|--|
| -   | Chief, Environmental Enforcemen   |                 | RECEIVED COPY                               |  |  |  |
| 2   | Environment and Natural Resource<br>United States Department of Just          |                 | _ 1   |  |  |  |
| 3   | Washington, D.C. 20530  |                 | APR 1 3 2000                                |  |  |  |
| 4   | DAVID B. GLAZER Environmental Enforcement Section                             | on /            | CLERK US DISTRICT COURT DISTRIGT OF ARIZONA |  |  |  |
| _   | Environment and Natural Resource  |                 | BY BEBUTY                                   |  |  |  |
| 5   | 301 Howard Street, Suite 870<br>San Francisco, California 94105               |                 |   |  |  |  |
| 6   | Telephone: (415) 744-6491   |                 |   |  |  |  |
| 7   | JOSÉ DE JESUS RIVERA  |                 | V2  |  |  |  |
| 8   | United States Attorney District of Arizona                                    |                 | LODGED LODGED RECEIVED COPY                 |  |  |  |
| °   | DAVID DUNCAN  | 4               |   |  |  |  |
| 9   | Assistant United States Attorne Arizona State Bar No. 11464                   | У               | MAY 2 3 2000                                |  |  |  |
| LO  | 4000 United States Courthouse   |                 | CLERKU S DISTRICT COURT                     |  |  |  |
| 11  | 230 North First Avenue<br>Phoenix, Arizona 85025                              | ·               | BYDEPUTY                                    |  |  |  |
| l   | Telephone: (602) 514-7748   |                 |   |  |  |  |
| 12  | Attorneys for Plaintiff United  | States of A     | merica                                      |  |  |  |
| 13  | -   |                 |   |  |  |  |
| 14  | JOHN D. FOGNANI<br>Zevnik Horton Guibord McGovern                             |                 |   |  |  |  |
| , _ | Palmer & Fognani, L.L.P.  |                 |   |  |  |  |
| 15  | 555 17 <sup>TH</sup> Street, 26 <sup>th</sup> Floor<br>Denver, Colorado 80202 |                 |   |  |  |  |
| 16  | Telephone: (303) 382-6207   |                 | ,   |  |  |  |
| 17  | SARAH A. STRUNK   |                 |   |  |  |  |
| 18  | Senior Attorney<br>Cyprus Amax Minerals Company                               |                 |   |  |  |  |
|     | 1501 W. Fountainhead Parkway, S   | uite 290        |   |  |  |  |
| 19  | Tempe, Arizona 85282<br>Telephone: (602) 929-4412                             |                 |   |  |  |  |
| 20  | •   | m ) G           |   |  |  |  |
| 21  | Attorneys for Defendant Cyprus Tohono Corporation                             |                 |   |  |  |  |
| 22  | UNITED STATE  | ב הופייםוכיי (  | COUDT                                       |  |  |  |
|     |   |                 |   |  |  |  |
| 23  | FOR THE DIST  | RICT OF ARI     | ZONA  |  |  |  |
| 24  | United States of America, )   | חחי עויי        | 0654PHX RCB                                 |  |  |  |
| 25  | )   | <b>O G</b> , 42 |   |  |  |  |
| 26  | Plaintiff, )  | CIVIL A         | ACTION NO.                                  |  |  |  |
|     | v.  | CONSENT         | DECREE                                      |  |  |  |
| 27  | Cyprus Tohono Corporation,  |                 |   |  |  |  |
| 28  | Defendant.  |                 |   |  |  |  |
|     | )   |                 |   |  |  |  |

#### CONSENT DECREE

WHEREAS, Plaintiff United States of America, on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), is concurrently filing a Complaint in the United States District Court for the District of Arizona, pursuant to Section 109 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. § 9609, for the assessment of civil penalties against Defendant Cyprus Tohono Corporation ("Cyprus Tohono") for violations of CERCLA and regulations promulgated thereunder;

WHEREAS, Cyprus Tohono owns and operates a copper mining operation (the "Tohono Mine" or "Facility") on land leased from the Tohono O'odham Nation in the Sif Oidak District located in Pinal County, Arizona;

WHEREAS, the Complaint alleges that Defendant Cyprus Tohono failed to immediately notify the National Response Center of the release into the environment of a quantity, in excess of 1,000 pounds, of sulfuric acid from a pipeline at the Tohono Mine, in violation of Section 103 of CERCLA, 42 U.S.C. § 9603;

WHEREAS, Cyprus Tohono, without filing any answer in this action, neither admits nor denies the violations alleged in the Complaint;

WHEREAS, the United States and Cyprus Tohono (the "Parties") agree that settlement of this action is in the public interest and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this action and avoiding protracted litigation costs and expenses;

WHEREAS, the Parties recognize, and this Court by entering

this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and that this Consent Decree is fair, reasonable and in the public interest.

NOW THEREFORE, before taking any testimony, without the adjudication of any issue of fact or law, and upon the consent and agreement of the Parties to this Consent Decree, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

#### I. PARTIES, JURISDICTION AND VENUE

- 1. Plaintiff United States, by the authority of the Attorney General of the United States and through its undersigned counsel, is acting at the request and on behalf of the Administrator of EPA.
- 2. Defendant Cyprus Tohono is incorporated in the State of Delaware and, at all times relevant to the violations alleged in the Complaint, was and is the owner and operator of the Facility at which the violations alleged in the Complaint occurred.

  Cyprus Tohono is a "person" within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- 3. This Court has jurisdiction over the subject matter of this action and over Cyprus Tohono pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Sections 109(c) and 113(b) of CERCLA, 42 U.S.C. §§ 9609(c) and 9613(b). The Complaint states a claim upon which relief may be granted against Cyprus Tohono pursuant to Section 109(c) of CERCLA, 42 U.S.C. § 9609(c).
- 4. Venue is proper in the District of Arizona pursuant to Section 113(b) of CERCLA, 42 U.S.C. § 9613(b).
  - 5. Cyprus Tohono waives any and all objections and

defenses that it may have to the jurisdiction of this Court and the venue in this District.

#### II. APPLICABILITY

- 6. This Consent Decree shall apply to and be binding upon the United States and upon Cyprus Tohono and its officers, directors, agents, servants, employees, successors, and assigns until the termination of this Consent Decree. Any change in ownership or corporate status of Cyprus Tohono including, but not limited to, any transfer of assets or real or personal property, shall in no way alter Cyprus Tohono's responsibilities under this Consent Decree.
- 7. Cyprus Tohono shall give written notice of this Consent Decree to any successors in interest prior to transfer of ownership or operation of the Facility and shall provide a copy of this Consent Decree to any successor in interest. Cyprus Tohono shall notify EPA, in accordance with Section X (Notices, Reports, and Submissions), of any successor in interest not later than ten (10) calendar days after any such transfer.

#### III. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

- 8. Cyprus Tohono shall perform two (2) Supplemental Environmental Projects ("SEP") relating to (a) the preparation of certain deliverables and implementation of certain work regarding the evaporation ponds at the mine site owned by Cyprus Tohono, in accordance with the Scope of Work ("SOW") appended hereto as Exhibit A; and (b) the purchase of certain emergency response equipment as provided in subparagraph b, below.
- a. Cyprus Tohono shall expend a total of \$150,000 on the SEP identified in Exhibit A entitled: "Consent Decree Scope

of Work for Certain Work Regarding the Evaporation Ponds."

- b. Cyprus Tohono shall expend a total of \$75,000 on a separate SEP to purchase emergency response equipment for the Tohono O'odham Nation. The emergency response equipment shall be purchased by Cyprus Tohono within sixty (60) days after Cyprus Tohono receives from the Tohono O'odham Nation a list of the equipment chosen by the Nation, provided, however, that Cyprus Tohono shall have at least sixty (60) days following the entry of this Consent Decree in which to make such purchases. Cyprus Tohono shall certify to EPA in writing that it has purchased the required emergency response equipment and shall provide an accounting showing that \$75,000 was expended for that purpose, and submit substantiating documentation. The certification and the accounting shall each include a certification statement as provided in Paragraph 49 of the Consent Decree.
- 9. Not later than 180 days from the entry of this Consent Decree, Cyprus Tohono shall submit a technical report that provides geochemical and hydrogeological characterization data of the Evaporation ponds and immediate surrounding area as provided in Exhibit A, Paragraph 2.0. In addition Cyprus Tohono shall provide an accounting showing that \$150,000 was expended on the SEP explained in Exhibit A, and submit substantiating documentation. The technical report and the accounting shall each include a certification statement as provided in Paragraph 49 of the Consent Decree.
- 10. In the event that Cyprus Tohono publicizes any of the SEPs or the results of any of the SEPs, Cyprus Tohono shall state in a prominent manner that the project was undertaken as part of

a settlement of an enforcement action by EPA.

1

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

IV. CIVIL PENALTY

- Within thirty (30) calendar days after the entry date of this Consent Decree, Cyprus Tohono shall pay a civil penalty to the United States in the amount of One Hundred Thousand Dollars (\$100,000). Payment shall be made by Electronic Funds Transfer ("EFT") to the United States Department of Justice in accordance with current EFT procedures, referencing USAO File Number 1994VO1498, DOJ Case Number 90-11-2-1240, Superfund Account Code No. 09ZZ and the civil action case name and case number of the District of Arizona. The costs of such electronic funds transfer shall be the responsibility of Cyprus Tohono. Payment shall be made in accordance with instructions provided to Cyprus Tohono by the Financial Litigation Unit of the U.S. Attorney's Office in the District of Arizona. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. Cyprus Tohono shall provide notice of payment, referencing USAO File Number 1994VO1498, DOJ Case Number 90-11-2-1240, and the civil action case name and case number, to the United States as provided in Section X (Notices, Reports and Submissions).
- 12. If Cyprus Tohono fails to pay the full amount of the civil penalty specified in this Section when due, then Cyprus Tohono shall pay to the United States (in addition to the unpaid balance of such penalty) both: (i) stipulated penalties, in accordance with Section V (Stipulated Penalties); and (ii) interest, (iii) a nonpayment penalty, and (iv) the United States enforcement expenses, in accordance with Section VI (Late Payment/Nonpayment of Penalty). Payment of the unpaid balance of

the civil penalty specified in this Section shall be made in accordance with Paragraph 11. Payment of stipulated penalties, interest, nonpayment penalties shall be made in accordance with Paragraph 20.

- 13. Upon the entry of this Consent Decree, the United States shall be deemed a judgment creditor for purposes of collection of the civil penalty required by this Section. In any collection proceeding, the validity, amount, and appropriateness of the civil penalty specified in this Section and of this Consent Decree shall not be subject to review.
- 14. The payment of the civil penalty specified in this Section shall not be deducted by Cyprus Tohono or any other person or entity for federal, state, or local taxation purposes.

#### V. <u>STIPULATED PENALTIES</u>

- 15. Except as may be excused under Section VII (Force Majeure), or excused by EPA for good cause shown by Cyprus Tohono or otherwise, Cyprus Tohono shall pay stipulated penalties in the amount of Two Thousand, Five Hundred Dollars (\$2,500) per day to the United States for each day that Cyprus Tohono fails to comply with the terms and conditions of this Consent Decree other than terms and conditions in Section III (Supplemental Environmental Projects).
- 16. All stipulated penalties shall automatically begin to accrue on the day after the complete performance is due, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Nothing herein shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent

Decree.

- 17. In the event Cyprus fails to expend \$150,000 on the SEP described in Exhibit A to this Consent Decree, Cyprus shall pay a stipulated penalty consisting of the difference between \$150,000 and the amount expended.
- 18. In the event Cyprus fails to expend \$75,000 on the SEP as provided in Paragraph 8.b. to this Consent Decree, Cyprus shall pay a stipulated penalty consisting of the difference between \$75,000 and the amount expended.
- 19. Following EPA's determination that Cyprus Tohono has failed to comply with a term or condition of this Consent Decree, EPA may give Cyprus Tohono written notification of the same and describe the noncompliance. EPA may send Cyprus Tohono a written demand for the payment of stipulated penalties. However, penalties shall accrue regardless of whether EPA has notified Cyprus Tohono of its noncompliance.
- 20. All stipulated penalties accruing under this Section shall be due and payable to the United States within thirty (30) calendar days after the date of any failure to comply with the terms and conditions of this Consent Decree. All payments to the United States under this Section shall be made by certified check payable to the "Treasurer of the United States of America," and shall be sent by certified mail with return receipt requested to:

David Duncan, Esq.
Assistant United States Attorney
4000 United States Courthouse
230 North First Avenue
Phoenix, Arizona 85025

The payment of the stipulated penalty shall be accompanied by a transmittal letter identifying this Consent Decree, this Court's

assigned Civil Action Number, and DOJ's assigned Case Number 90-11-2-1240, Superfund Account No. 09ZZ and stating that the payment is for stipulated penalties under this Section.

Concurrent with delivery of the payment of the stipulated penalty, Cyprus Tohono shall send a copy of the certified check and transmittal letter to both:

Letitia D. Moore, Esq.
Assistant Regional Counsel
Office of Regional Counsel (ORC-3)
United States Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

and

Joel M. Gross, Esq.
Section Chief
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
Ben Franklin Station, P. O. Box 7611
Washington, D. C. 20044

- 21. If Cyprus Tohono fails to pay the full amount of any stipulated penalty specified in this Section when it is due, then Cyprus Tohono shall pay to the United States (in addition to the unpaid balance of such penalty) interest, a nonpayment penalty, and the United States' enforcement expenses, in accordance with Section VI (Late Payment/Nonpayment of Penalty). Payment of the unpaid balance of the stipulated penalty, interest, nonpayment penalty and the United States enforcement expenses shall be made in accordance with this Paragraph.
- 22. Stipulated penalties with respect to a matter disputed under Section VIII (Dispute Resolution) shall continue to accrue as provided in this Section during any dispute resolution period, but need not be paid until the following:

2.5

- a. If the dispute is resolved by agreement among the Parties or by a determination of EPA that is not appealed to this Court, accrued penalties determined to be owing shall be paid to EPA within fifteen (15) calendar days of the agreement or the receipt of EPA's determination;
- b. If the dispute is appealed to this Court and the United States prevails in whole or in part, Cyprus Tohono shall pay all accrued penalties determined by this Court to be owed to EPA within sixty (60) calendar days of receipt of this Court's decision or order, except as provided in Subparagraph 22c. below:
- C. If this Court's decision is appealed by any Party,
  Cyprus Tohono shall pay all accrued penalties
  determined by this Court to be owing to the United
  States into an interest-bearing escrow account
  within sixty (60) calendar days of receipt of this
  Court's decision or order. Penalties shall be
  paid into this account as they continue to accrue,
  at least every sixty (60) calendar days. Within
  fifteen (15) calendar days of receipt of the final
  appellate court decision, the escrow agent shall
  pay the balance of the account to EPA or to Cyprus
  Tohono in accordance with the Order of the Court.
- 23. The payment of stipulated penalties shall not alter in any way Cyprus Tohono's obligation to comply with all of the terms and conditions of this Consent Decree.

24. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

- 25. The payment of stipulated penalties specified in this Section shall not be deducted by Cyprus Tohono or any other person or entity for federal, state, or local taxation purposes.
- 26. Payment of stipulated penalties as set forth in this Section shall be in addition to any other rights or remedies available to the United States or EPA by reason of Cyprus Tohono's failure to comply with the requirements of this Consent Decree or with all applicable federal, state, and local laws, statutes, regulations, rules, ordinances, and permits; including, but not limited to, CERCLA, the regulations promulgated thereunder, and all applicable permits.

#### VI. LATE PAYMENT/NONPAYMENT\_OF\_PENALTY

- 27. If Cyprus Tohono fails to pay the full amount of the civil penalty specified in Section IV (Civil Penalty) when it is due or any stipulated penalty specified in Section V (Stipulated Penalties) when it is due, then Cyprus Tohono shall pay to the United States (in addition to the unpaid balance of such penalty) all of the following in accordance with this Section: interest, a nonpayment penalty and the United States' enforcement expenses.
- 28. Interest shall accrue on the unpaid balance of the civil penalty specified in Section IV (Civil Penalty) or on any unpaid balance of stipulated penalties to be paid in accordance with Section V (Stipulated Penalties) at the rate of 6 percent (6%) per annum. Interest shall be computed daily and compounded

annually. Interest shall be calculated from the date payment is due under this Consent Decree through the date of actual payment.

- 29. A quarterly nonpayment penalty shall be assessed for each quarter during which any failure to pay the full amount of the civil penalty specified in Section IV (Civil Penalty) when it is due or any stipulated penalty specified in Section V (Stipulated Penalties) when it is due persists. Such nonpayment penalty shall be ten percent (10%) of the aggregate amount of Cyprus Tohono's outstanding or overdue penalties and nonpayment penalties accrued as of the beginning of such quarter.
- 30. Notwithstanding Section XIV (Costs of Suit), Cyprus
  Tohono shall pay the United States enforcement expenses,
  including, but not limited to, attorneys' fees and costs, that
  the United States incurs for any proceedings to collect any
  unpaid balance of the civil penalty specified in Section IV
  (Civil Penalty) and on any unpaid balance of stipulated penalties
  to be paid in accordance with Section V (Stipulated Penalties).
- 31. The payment of any interest, nonpayment penalty, or United States enforcement expenses specified in this Section shall not be deducted by Cyprus Tohono or any other person or entity for federal, state, or local taxation purposes.

#### VII. FORCE MAJEURE

- 32. Cyprus Tohono shall perform all of its obligations under this Consent Decree in accordance with the time schedules set out herein, except to the extent and for the period of time that such performance is prevented or delayed by an event that constitutes a force majeure.
  - 33. For purposes of this Consent Decree, a "force majeure"

is defined as an event arising from causes beyond the control of Cyprus Tohono (and its contractors and agents) that prevents or delays the performance of any obligation under this Consent Decree despite Cyprus Tohono's (and its contractors' and agents') best efforts to fulfill the obligation. The requirement that Cyprus Tohono, its contractors, and its agents exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (i) as it is occurring and (ii) following the potential force majeure event, such that delay is avoided or minimized to the greatest extent possible. "Force majeure" does not include normal inclement weather, or economic hardship associated with Cyprus Tohono's performance of its obligations under this Consent Decree.

34. If an event occurs or has occurred that may prevent or delay the performance of any obligation under this Consent Decree and that Cyprus Tohono believes constitutes a force majeure, Cyprus Tohono shall provide written notification to EPA within twenty (20) calendar days of the date that Cyprus Tohono, its contractors, or its agents first knew or should have known, by exercise of due diligence, of the commencement of such event. The written notice shall fully describe (i) the event that may prevent or delay performance; (ii) the reason that such event may prevent or delay performance; (iii) the anticipated duration of the delay; (iv) all actions taken or to be taken to avoid or minimize the delay; (v) a schedule for implementation of any measures to be taken to avoid or mitigate the delay or the effect

of the delay; and (vi) the reasons the delay is beyond the reasonable control of Cyprus Tohono, its contractors, and agents. Cyprus Tohono shall include with the notice all material documentation supporting its position. Failure of Cyprus Tohono to comply reasonably with the notification requirements of this Paragraph shall automatically preclude Cyprus Tohono from asserting any claim of force majeure for that event for the period of time of such failure to comply, as well as for any additional delay caused by such failure.

- 35. If EPA agrees that the event constitutes a force majeure, then EPA will extend the time for performance of Cyprus Tohono's obligations under this Consent Decree that are affected by the force majeure event for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Cyprus Tohono in writing of the length of time of the extension, if any, for performance of the obligations affected by the force majeure event.
- 36. If EPA determines that the event does not constitute a force majeure, then EPA will notify Cyprus Tohono in writing of its determination. If Cyprus Tohono disagrees with EPA's determination, then Cyprus Tohono may initiate the dispute resolution procedures of Section VIII (Dispute Resolution).

#### VIII. DISPUTE RESOLUTION

37. This Section provides dispute resolution procedures if Cyprus Tohono disputes any of the following EPA determinations:

(i) a determination regarding noncompliance with a term or

condition of this Consent Decree and any associated stipulated penalties pursuant to Section V (Stipulated Penalties); (ii) a determination regarding force majeure pursuant to Section VII (Force Majeure); (iii) a determination regarding termination of this Consent Decree pursuant to Paragraph 60; or (iv) a determination regarding the implementation of the SOW in Exhibit

- 38. If Cyprus Tohono disputes any of the EPA determinations referred to in Paragraph 40, then Cyprus Tohono shall submit to EPA and DOJ a written notice outlining the nature of the dispute and requesting informal negotiations to resolve the dispute. For disputes regarding stipulated penalty determinations, Cyprus Tohono shall submit such notice to EPA and DOJ no later than thirty (30) calendar days after Cyprus Tohono receives EPA's determination under Paragraph 19. For disputes regarding force majeure determinations, Cyprus Tohono shall submit such notice to EPA and DOJ no later than fifteen (15) calendar days after Cyprus Tohono receives EPA's determination under Paragraph 36. Cyprus Tohono's failure to comply with the applicable notification requirements of the preceding two sentences will be deemed an automatic forfeiture of Cyprus Tohono's right to dispute EPA's determination.
- 39. Informal negotiations shall not extend beyond thirty (30) calendar days from the date when EPA and DOJ receive Cyprus Tohono's written notice, unless the Parties agree in writing to a different period of time.
- 40. In the event that the Parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the

25

26

27

28

position advanced by EPA shall be considered binding, unless
Cyprus Tohono files a motion with this Court for dispute
resolution. Any such motion must be filed within twenty (20)
calendar days after termination of informal negotiations, as
expressed by one of the parties in writing, and must be submitted
concurrently to EPA and DOJ. The United States shall then have
thirty (30) calendar days to respond to Cyprus Tohono's motion.

- 41. In any dispute resolution proceeding under this Section, Cyprus Tohono bears the burden of proving that:
  - a. Cyprus Tohono did not violate the terms and conditions of this Consent Decree:
  - b. in disputes regarding a force majeure determination, the event constitutes a force majeure; best efforts were exercised to fulfill the obligation and to avoid or minimize delay to the greatest extent possible; the duration of the delay or the extension sought was or will be warranted under the circumstances; and Cyprus Tohono complied with the notification requirements of Paragraph 34;
  - c. in disputes regarding the termination of this Consent Decree, all conditions for termination pursuant to Paragraph 60 have been satisfied; and
  - d. in disputes regarding the SOW set forth in Exhibit

    A or the purchase of emergency response equipment
    as provided in Paragraph 8.b., that it
    substantially complied with the terms thereof.
  - 42. Unless EPA or this Court agrees otherwise, Cyprus

Tohono's invocation of dispute resolution procedures under this Section shall not extend, postpone, or affect in any way any obligation of Cyprus Tohono under this Consent Decree not directly in dispute.

#### IX. ACCESS AND INFORMATION GATHERING

43. Any authorized representative of EPA, including EPA authorized contractors and agents, upon presentation of proper credentials, shall have the right to enter and inspect the Facility to ensure Cyprus Tohono's compliance with the provisions of this Consent Decree and the requirements of CERCLA and the regulations promulgated thereunder. This provision of the Consent Decree is in addition to, and in no way limits or otherwise affects EPA's access, entry, inspection, monitoring, or information gathering authorities and rights, including enforcement authorities related thereto, under CERCLA or under any other federal statue or regulation.

#### X. NOTICES, REPORTS AND SUBMISSIONS

44. Unless otherwise provided for in this Consent Decree, all notices, reports, and submissions from Cyprus Tohono to EPA required by this Consent Decree shall be addressed to:

Keith Takata
Director, Hazardous Waste Division (Mail Code: SFD-1)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105

45. Unless otherwise provided for in this Consent Decree, all notices, reports and submissions from Cyprus Tohono to either the United States or DOJ required by this Consent Decree shall reference DOJ's assigned Case Number 90-11-2-1240 and be

2.5

addressed to: 1 2 Joel Gross, Esq. Chief, Environmental Enforcement Section Environment and Natural Resources Division 3 United States Department of Justice 4 P.O. Box 7611 Washington, D.C. 20044-7611 5 and 6 David Duncan, Esq. 7 Assistant United States Attorney 4000 United States Courthouse 230 North First Avenue 8 Phoenix, Arizona 85025 9 46. All notices from the United States, DOJ or EPA to 10 Cyprus Tohono required by this Consent Decree shall be addressed 11 to: 12 General Counsel Cyprus Tohono Corporation 13 9100 East Mineral Circle Englewood, Colorado 80112 14 15 and President 16 Cyprus Tohono Corporation 17 1501 W. Fountainhead Parkway, Suite 290 Tempe, Arizona 85282 18 and 19 John D. Fognani, Esq. Zevnik Horton Guibord McGovern Palmer & Fognani, L.L.P. 20 555 17<sup>TH</sup> Street, 26<sup>th</sup> Floor Denver, Colorado 80202 21 22 All notices, reports, and submissions that Cyprus 23 Tohono is required to submit pursuant to this Consent Decree 24 shall (i) be in writing; (ii) indicate this Court's assigned 25 Civil Action Number; (iii) be sent by hand delivery, overnight or

(v) be hand delivered or postmarked by the applicable due date to

express mail, or first-class certified mail; (iv) be sent with

return receipt requested or other written proof of delivery; and

26

the appropriate addressee(s).

48. Unless otherwise provided for in this Consent Decree, a notice, report, or submission shall be deemed submitted on (i) the date it is received, if it is hand delivered; or (ii) the date it is postmarked, if it is sent by overnight, express, or first-class certified mail.

49. Cyprus Tohono shall include in all notices, reports and submissions required by this Consent Decree a certification statement signed by a responsible official. The certification shall contain the following language:

I certify under penalty of law that the information contained in or accompanying this document is true, accurate, and complete;

or

As to the identified portions of this document for which I cannot personally verify their truth and accuracy, I certify that based on my inquiry of the person or persons directly responsible for gathering the information, the information is true, accurate and complete;

A "responsible official" for purposes of this provision means a president, secretary, treasurer, or vice president of Cyprus Tohono; a senior management representative at the facility; or any person who performs similar policy or decision making functions for Cyprus Tohono.

50. Cyprus Tohono shall maintain at the Facility copies of all notices, reports, submissions, and records required by this Consent Decree until the termination of this Consent Decree or as required by applicable law, whichever is later. Cyprus Tohono shall make copies of all notices, reports, submissions, and records required by this Consent Decree available to EPA upon

request.

51. All information and documents that Cyprus Tohono submits to EPA pursuant to this Consent Decree shall be available to the public unless identified and deemed confidential by Cyprus Tohono in conformance with CERCLA and 40 C.F.R. Part 2. The information or documents so identified as confidential will be disclosed only in accordance with CERCLA and 40 C.F.R. Part 2.

#### XI. EFFECT OF CONSENT DECREE

- claims for the violations that the United States specifically alleged in the Complaint filed in this action and the civil claims alleged or set forth in the Finding of Violation and Order for Compliance in the administrative proceeding, Docket No. IX-FY93-30, issued on April 19, 1993, by Water Management Division of the U.S. Environmental Protection Agency-Region IX ("the Administrative Order"). Cyprus Tohono's satisfaction of the terms hereof, including completion of the SEPs, shall constitute full satisfaction of the claims against it, including those for civil penalties, for past civil violations alleged in the Complaint and in the Administrative Order.
- 53. Nothing in this Consent Decree is intended to nor shall be construed to operate in any way to resolve any civil liability for violations of any provision of any federal, state, tribal or local law, statute, regulation, rule, ordinance, or permit not specifically alleged in the Complaint filed in this action, or the Administrative Order.
- 54. This Consent Decree does not exempt, relieve, modify, or affect in any way Cyprus Tohono's duty to comply with all

applicable federal, state, and local laws, statutes, regulations, rules, ordinances, and permits; including, but not limited to, CERCLA, and the regulations promulgated thereunder.

- 55. This Consent Decree is not, and shall not be construed to be, a permit or a modification of any existing permit issued pursuant to any federal, state, tribal or local law, statute, regulation, rule, or ordinance; nor shall this Consent Decree in any way relieve Cyprus Tohono of any obligation it may have to obtain a permit or to comply with a permit.
- of this Consent Decree, warrant or aver in any manner that Cyprus Tohono's complete compliance with the Consent Decree will result in compliance with the provisions of CERCLA, the regulations promulgated thereunder, or any applicable permits.

  Notwithstanding the review or approval of the United States or EPA of any plans, reports, policies, or procedures formulated pursuant to this Consent Decree, Cyprus Tohono shall remain solely responsible for any noncompliance with the terms or conditions of this Consent Decree or with any federal, state, tribal or local laws, statutes, regulations, rules, ordinances, or permits; including, but not limited to, CERCLA, the regulations promulgated thereunder, and all applicable permits.
- 57. In addition to any other authority, right, or remedy available to the United States, the United States specifically reserves any and all authorities, rights, and remedies available to it to address (i) any violation of this Consent Decree or any violation that the United States did not specifically allege in the Complaint filed in this action, or (ii) any situation or

condition that may present an imminent and substantial endangerment to the environment or to the public health or welfare.

#### XII. EFFECTIVE DATE, MODIFICATION, AND TERMINATION

- 58. This Consent Decree will take effect on the date it is entered by the Court.
- 59. Except to change the identity or address of persons receiving notification in accordance with Section X (Notices, Reports, and Submissions), any modification of this Consent Decree must be in writing and approved by the Parties and the Court before it will be deemed effective.
- 60. This Consent Decree shall terminate when all of the following conditions have been met:
  - a. Cyprus Tohono has completed each of the SEPs set forth in Section III (Supplemental Environmental Projects) of this Consent Decree;
  - b. Cyprus Tohono has paid the civil penalty as set forth in Section IV (Civil Penalty); stipulated penalties, if any, as specified in Section V (Stipulated Penalties); all interest, nonpayment penalties, if any, and United States' enforcement expenses, if any, as specified in Section VI (Late Payment/Nonpayment of Penalty); and no penalties or other monetary obligations due under this Consent Decree are outstanding or owed to the United States; and
  - c. All disputes, if any, arising under the Consent Decree have been resolved.

1.5

62. Cyprus Tohono shall initiate termination of this
Consent Decree by submitting a notification to EPA and DOJ that
all conditions for termination pursuant to Paragraph 60 have been
satisfied. If EPA agrees with Cyprus Tohono's notification, then
the Parties shall file a joint motion or stipulation for
termination of this Consent Decree. If EPA disagrees with Cyprus
Tohono's notification, then Cyprus Tohono may initiate the
dispute resolution procedures of Section VIII (Dispute
Resolution).

#### XIII. RETENTION OF JURISDICTION

63. Until the termination of this Consent Decree pursuant to Section XII (Effective Date, Modification, and Termination), this Court shall retain jurisdiction over this action and all disputes arising hereunder (to the extent that this Consent Decree provides for resolution of disputes by this Court) for the purposes of implementing and enforcing the terms and conditions of this Consent Decree.

#### XIV. COSTS OF SUIT

64. Each Party shall bear its own costs and attorneys' fees incurred in this action through the date upon which the Consent Decree is entered.

#### XV. <u>SIGNATORIES AND SERVICE</u>

65. The Section Chief of the Environmental Enforcement

Section of DOJ and each undersigned representative of Cyprus
Tohono certify that they are fully authorized to enter into the
terms and conditions of this Consent Decree and to execute and
legally bind to this Consent Decree the Party they represent.

67. With regard to the Complaint filed concurrently with the lodging of this Consent Decree, Cyprus Tohono hereby agrees to accept service of process and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and in any applicable local rules of this Court, including, but not limited to, service of a summons.

ORDERED, Dated and ENTERED this 24 day of April 2000.

UNITED STATES DISTRICT JUDGE

WE HEREBY CONSENT to the entry of this Decree.

FOR PLAINTIFF UNITED STATES OF AMERICA

5-17-2000

JOEL M. GROSS Section Chief

Environmental Enforcement Section Environment and Natural Resources Division

United States Department of Justice

→ EPA/ORC

Trial Attorney

Environmental Enforcement Section Environment and Natural Resources Division

United States Department of Justice

WE HEREBY CONSENT to the entry of this Decree. Director, Superfund Division United States Environmental Protection Agency, Region IX 

WE HEREBY CONSENT to the entry of this Decree. FOR DEFENDANT CYPRUS TOHONO CORPORATION Jumby 30, 1991 Cyprus Tohono Corporations Via Plus dest Corporation DATE and See Ret may JOHN D. FOGNANI Zevnik Horton Guibord McGovern Palmer & Fognani, L.L.P. 555 17TH Street, 26th Floor Denver, CO 80202 Telephone: (303) 382-6207 

### Prepared for:

# U.S. ENVIRONMENTAL PROTECTION AGENCY And TOHONO O'ODHAM NATION

## CONSENT DECREE SCOPE OF WORK

#### **FOR**

# **CERTAIN WORK REGARDING THE EVAPORATION PONDS**

January 4, 2000

Prepared by:

Cyprus Tohono Corporation P.O. Box 15009 Casa Grande, Arizona 85230

And

Montgomery Watson
Mining Group
4820 S. Mill Avenue, Suite 202
Tempe, Arizona 85282

# **TABLE OF CONTENTS**

| Section | n No. Page No.                                   | <u>).</u> |
|---------|--|-----------|
| 1.0     | SCOPE OF WORK                                    | 1         |
| 1.1     | OBJECTIVES                                       | 1         |
| 1.2     | SITE DESCRIPTION                                 | 1         |
| 1.3     | REGULATORY FRAMEWORK                             | 1         |
| 1.4     | SUBMISSIONS                                      | 2         |
| 1.5     | MODIFICATIONS                                    | 3         |
| 1.6     | EFFECTIVE DATE                                   | 3         |
| 1.7     | TERMINATION DATE                                 |           |
| 1.8     | SCHEDULE   |           |
| 1.9     | COMMUNICATIONS                                   | 3         |
| 2.0     | GEOCHEMICAL AND HYDROGEOLOGICAL CHARACTERIZATION | 4         |
| 2.1     | SEP SCHEDULE AND DELIVERABLES                    | 4         |
| 2.2     | COMPLETION OF SEP                                | . 4       |
| 3.0     | RECLAMATION PLAN - EVAPORATION PONDS             | . 5       |
| 3.1     | RECLAMATION OBJECTIVES                           | . 5       |
| 3.2     | SITE CHARACTERIZATION                            | . 5       |
| 3       | 2.2.1 Data Review                                | . 5       |
|         | P.2.2 Sampling and Testing                       | . 5       |
| 3       | 2.2.3 Revegetation Program                       |           |
| 3.3     |  |           |
| 3.4     |  |           |
| -       | 3.4.1 Drainage and Erosion Control Plan          |           |
| _       | 3.4.2 Cover Implementation Plan                  |           |
|         | 3.4.3 Revegetation Plan                          |           |
| 3.5     |  |           |
| 3.6     | COMPLETION OF SEP                                | . 7       |
| 4.0     | EVAPORATION POND ACCESS CONTROL                  |           |
| 4.1     | Design Review & Engineering Quotes               | . 8       |
| 4.2     |  |           |
| 4.3     | SEP SCHEDULE                                     | . 8       |
| 5.0     | EVAPORATION POND FUGITIVE DUST CONTROL           | . 9       |
| 5.1     | DESIGN REVIEW & ENGINEERING QUOTES               | . 9       |
| 5.2     | COMPLETION OF SEP                                | 9         |
| 5.3     | SEP SCHEDULE                                     | 9         |
| 6.0     | REFERENCES                                       | 10        |

# LIST OF FIGURES

| Figure No. | Description                                      |  |  |
|------------|--|--|--|
| 1          | General Location Map                             |  |  |
| 2          | Site Map   |  |  |
| 3          | Schedule for Supplemental Environmental Projects |  |  |

#### 1.0 SCOPE OF WORK

#### 1.1 OBJECTIVES

Cyprus Tohono Corporation (Cyprus Tohono) provides the following Scope of Work (SOW) for the completion of the responsibilities identified in Section III, Supplemental Environmental Projects (SEPs), of Consent Decree #90-11-2-1240, which resolves certain U.S. Environmental Protection Agency (USEPA) complaints against Cyprus Tohono. The objectives of this SOW are to provide a concise statement of the work to be performed within the content of the Consent Decree and to present the criteria upon which the approval for the completion of the work will be given. The SEPs to be performed by Cyprus Tohono include several actions for certain work regarding the Evaporation Ponds located on the property. These action items are:

- 1. Submittal of a Geochemical and Hydrogeological Characterization of the Evaporation Ponds Area of the Cyprus Tohono Minesite.
- 2. Completion of a Reclamation Plan (RP) for the closure of the Evaporation Ponds.
- 3. Construction of access control to the Evaporation Ponds.
- 4. Implementation of fugitive dust control at the Evaporation Ponds.

#### 1.2 SITE DESCRIPTION

Cyprus Tohono operates a copper mine and processing facility on reservation lands leased from the Tohono O'odham Indian Nation (TON). The Tohono Mine (formerly referred to as the Casa Grande Mine and the Lakeshore Mine) is located approximately 32 miles south of Casa Grande, Arizona, as shown on Figure 1. The location of property lease boundaries and mine facilities are shown on Figure 2.

There are three historical evaporation ponds on the property that are located approximately 2 miles southwest of the current mining facilities. The ponds cover an area of approximately 220 acres and were constructed in 1973. They have been lined with 3 to 8 feet of mill tailings and can be identified as follows:

- Evaporation Pond 1 approximately 40 acres of surface salts and subsurface mill tailings
- Evaporation Pond 2 approximately 70 acres of surface salts and subsurface mill tailings
- Evaporation Pond 3 approximately 110 acres of surface and subsurface mill tailings

The larger western pond (Evaporation Pond 3) has a capacity equivalent to that of the other two ponds combined for use as an overflow protection facility during large storm events. Currently the pond system exceeds the volume required to contain stormwater runoff from the 100-year 24-hour event. The ponds were constructed to collect excess volume from the process operations during times of water imbalances. In effect, they provide a large surface area to increase evaporation.

Several groundwater-monitoring wells near the Evaporation Ponds are monitored quarterly for piezometric and chemical data. The ponds are normally dry. Evaporation Ponds 1 and 2 currently lack vegetation, whereas vegetation can be observed on Evaporation Pond 3.

#### 1.3 REGULATORY FRAMEWORK

The implementation of this SEP will be performed in a manner that is substantially consistent with appropriate and applicable reclamation requirements as stated in the USBLM's "Cyprus Tohono

Corporation's Proposed Mine Expansion Final Environmental Impact Study", and the associated "Cyprus Tohono Corporation's Mine Plan of Operations for Expanded Open Pit and Heap leach Operation", both as approved in the Record of Decision of August 2, 1995.

#### 1.4 SUBMISSIONS

Implementation of this SEP will be coordinated by Cyprus Tohono with the USEPA. Notices and submissions of this SEP will be delivered to the U.S. Environmental Protection Agency (USEPA), the U.S. Department of Justice (USDOJ), and the TON Attorney General's office. All notices, reports, and submissions from Cyprus Tohono concerning this SEP shall reference DOJ's assigned Case Number 90-11-2-1240 and will be sent by certified mail. These submissions will be addressed as follows:

#### **USEPA**

Director
Hazardous Waste Division (Mail Code: SFD-1)
U.S. Environmental Protection Agency - Region IX
75 Hawthorne Street
San Francisco, CA 94105

#### **USDOJ**

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611

#### And

Assistant United States Attorney 4000 United States Courthouse 230 North First Avenue Phoenix, AZ 85025

#### Tohono O'odham Nation

Jonathon Jantzen Assistant Attorney General Tohono O'odham Nation P.O. Box 837 Sells, AZ 85634

All notices or replies from the USEPA, USDOJ, or TON to Cyprus Tohono shall be addressed to:

#### **Contract Counsel**

John D. Fognani Zevnik, Horton, Guibord, McGovern, Plamer, & Fognani 555 17<sup>th</sup> Street, 26<sup>th</sup> Floor Denver, Colorado 80202

#### **Cyprus Tohono Corporation**

General Counsel
Cyprus Tohono Corporation
9100 East Mineral Circle
Englewood, Colorado 80112

And

President
Cyprus Tohono Corporation
1501 W. Fountainhead Parkway, Suite 290
Tempe, AZ 85282

Cyprus Tohono shall maintain at the facility, copies of all submissions required by this SOW until the termination of the SEP. Cyprus Tohono shall make all such submissions available to the USEPA upon request.

#### 1.5 MODIFICATIONS

Except to change the identity or address of persons receiving notifications, any modification of this SOW or the Consent Decree must be in writing and be approved by the Parties (as defined in the Consent Decree) and the United States District Court before it will be deemed effective.

#### 1.6 EFFECTIVE DATE

This SOW will take effect on the date that the Consent Decree is entered by the United States District Court.

#### 1.7 TERMINATION DATE

This SOW shall terminate upon notification to the USEPA that Cyprus Tohono has completed the Supplemental Environmental Project.

#### 1.8 SCHEDULE

Figure 3, Schedule for Supplemental Environmental Projects, details the schedule for the Supplemental Environmental Projects from the time of entry of the Consent Decree by the United States District Court, through the implementation of the SOW to final notification of SEP completion by Cyprus Tohono to the USEPA.

#### 1.9 COMMUNICATIONS

Considering Cyprus Tohono's status as a neighbor to the Sif Oidak District (SOD) and to the Tohono O'odham Nation (TON), and the visual importance of the Tohono Mine to the nearby community, continual communication is considered essential to the overall success of this SEP. Cyprus Tohono will, therefore, endeavor to continually maintain open communications during the review process of the technical submittal and the completion of the work actions. Cyprus Tohono and their contractors will be available for consultation or presentation of the substantive technical information in this report.

# 2.0 GEOCHEMICAL AND HYDROGEOLOGICAL CHARACTERIZATION

Pursuant to Section III, Paragraph 8 of the Consent Decree, Cyprus Tohono shall submit a technical report that provides geochemical and hydrogeological characterization data of the Evaporation Ponds and immediate surrounding area.

#### 2.1 SEP SCHEDULE AND DELIVERABLES

Within 60 days of entry of this SOW, Cyprus Tohono shall submit to the USEPA a technical report entitled Geochemical and Hydrogeological Characterization of the Evaporation Ponds. This report will address the following objectives.

- Characterization of hydrogeological and water quality conditions within the Evaporation Pond groundwater regime;
- Evaluation in the nearby areas of potential sources for groundwater impacts;
- Characterization of the geochemistry of mine process materials placed in the area;
- Estimation of the rates of infiltration under current conditions;
- Estimation of current impacts to groundwater quality from infiltration through the materials in the area.

To achieve these objectives, the characterization report will include the following work tasks and information.

- Review and analysis of reports and data;
- Collection of groundwater and process material samples for laboratory analysis;
- Groundwater level measurements;
- Survey locations of pits, wells and boreholes;
- Aquifer testing;
- Inspection of drainages;
- Computer and analytical modeling.

#### 2.2 COMPLETION OF SEP

Upon submittal of this technical report, Cyprus Tohono will include notification to the USEPA that this action of the SEP, as listed in the Consent Decree Section III, Paragraph 8, is complete. Appropriate supporting documentation will be included in the submittal.

#### 3.0 RECLAMATION PLAN – EVAPORATION PONDS

The Evaporation Pond Reclamation Plan (RP) will use the current understanding of the hydrogeological environment of the Evaporation Ponds (Cyprus Tohono Geochemical and Hydrogeological Characterization Report) and the regulatory requirements under which Cyprus Tohono will perform reclamation activities at the site as a basis. An explanation of the proposed methodology to complete the RP for the Evaporation Ponds is presented below.

#### 3.1 RECLAMATION OBJECTIVES

The RP will provide a documented plan that will: 1) Visually mitigate the disturbed soils in the area, and 2) Mitigate, to the maximum extent practicable, the impacts of disturbed mine areas to downstream drainage. To achieve these objectives, the following plans will be developed:

- A Drainage & Erosion Control Plan;
- A Cover Implementation Plan;
- A Revegetation Plan.

#### 3.2 SITE CHARACTERIZATION

The initial obligation of the RP includes a thorough characterization of all critical technical parameters of the site as is necessary to provide the basis for developing a cost effective and implementable final design. Characterization will include geochemical, hydrogeological, and engineering data from the immediate area of the evaporation ponds. Each of the site characterization tasks is presented below.

#### 3.2.1 Data Review

A compilation and review of existing physical, chemical, and hydrological data needed to complete final engineering design of the RP for the Evaporation Ponds will be completed under this task. Relevant information will be gathered and evaluated to develop a conceptual understanding of site hydrogeology, geochemistry, and other pertinent engineering parameters. Much of this information will be obtained from the documents as described in the Geochemical and Hydrogeological Characterization Report identified in this SEP.

#### 3.2.2 Sampling and Testing

Based upon the existing information and the requirements of this task, the need for additional data will be determined. The additional data needs may include obtaining material samples from the Evaporation Pond and surrounding area and performing evaluation tests for engineering properties of the soils. These samples will be obtained from all of the various process and cover materials. Further information may be obtained from additional test pits within the processed materials and from geological logging of the proposed borrow sources.

#### 3.2.3 Revegetation Program

Existing information that has been developed to date in the Cyprus Tohono Revegetation Program will also be reviewed. The Cyprus Tohono Revegetation Program includes a Cooperative Agreement ("Agreement") with the Dept. of Agriculture's Natural Resources Conservation Service (NRCS) and the TON Soil and Water Conservation Service. The Agreement was developed in conjunction with Cyprus Tohono's 1995 EIS Record of Decision for a major mine expansion program. It consists of literature reviews, nursery tests, and field-test plots under the supervision of the NRCS. The goal of the Agreement is to develop viable revegetation techniques for all disturbed soils and processed materials on the mine site. The Agreement is currently in the last year of the five-year agreement period.

Cyprus Tohono has also successfully conducted commercial sized revegetation plots for the evaluation of the NRCS and other revegetation techniques. The results obtained at these revegetation areas will provide valuable information for this RP.

#### 3.3 ENGINEERING CHARACTERISTICS

Using the additional samples described above, engineering characteristics of the soils and materials on the Evaporation Pond site and from proposed borrow sources will be developed. Typical index properties required for the development of the engineering designs include the insitu moisture and density, atterberg limits, and grain size distribution. Additional characterization of the insitu and proposed borrow materials will also be completed to develop requirements for compaction and hydraulic conductivity. Defining the engineering properties of the natural materials will also be important for understanding their interaction with potential cover materials.

#### 3.4 REVIEW OF OPTIONS FOR THE RECLAMATION PLAN

The review of the various possible reclamation scenarios will incorporate all assembled data from the Evaporation Pond area into several viable plan alternatives for the site. Each plan, as defined in Section 3.1, will have several options proposed. An evaluation using three criteria: effectiveness, implementability, and cost; will then be used to determine the most appropriate method for achieving the project objectives. All options will then be prioritized based upon these criteria and a final Reclamation Plan will be selected. A review of critical criteria and possible options for each of the plans is presented in the following sections.

#### 3.4.1 Drainage and Erosion Control Plan

The proposed Drainage Control Plan will likely include surface water diversion channels to prevent run-on from contacting mine waste material; and, temporary and/or permanent control measures to control sediment and surface water discharge from the Evaporation Ponds.

Hydrologic data required to assure that the designs comply with regulatory standards and best practices include: 1) The maximum rate and volume of run-on that needs to be diverted away from the Evaporation Ponds and 2) The quantity and rate of run-off from the Evaporation Ponds that needs to be properly conveyed away. The quantity and peak rates of run-on and runoff will be determined with the HEC-1 Flood Hydrograph model developed by the U.S. Army Corps of Engineers. This model is commonly used to evaluate reclamation hydrology at mining sites. Additional hydrologic modeling may be needed to evaluate the effect of short-duration, high-intensity thunderstorm events on the cover sections and the developed diversions. The hydrologic modeling of the reclaimed areas will need to be refined during the design process, since the final regrading plan and selected cover section affect the runoff potential from the reclaimed mine process material areas.

There is little or no surface water flow at the site. However, immediately after short, high intensity rainfall events, surface water flows can be very large. Given these conditions, some sediment erosion should be expected even from natural undisturbed lands. Therefore, sediment retention facilities may be required. These facilities could consist of sediment ponds for complete sediment deposition to simple diversion berms for limited sediment deposition. Site specific permanent sediment control structures will be evaluated based upon channel locations, drainage basins, and proximity to the Evaporation Ponds.

Intermediate sediment control measures during and immediately after construction will include Best Management Practices (BMPs) in accordance with USEPA guidelines. Typical best management practices include minimizing disturbance areas and use of sediment control measures at the perimeter of any disturbance area.

#### 3.4.2 Cover Implementation Plan

The proposed cover plan for the Evaporation Ponds must meet the reclamation objectives stated for the site. Therefore, a series of possible cover sections will be developed and analyzed as part of the overall cover plan. The following cover layers typical of similar mine reclamation projects will likely be evaluated.

- Low permeability barrier layer (natural clay, HDPE, geosynthetic clay liner)
- Capillary break layer (processed or unprocessed pit overburden)
- Growth medium cover (mycorrhizae soils or screened pit overburden)
- Partial process materials removal in conjunction with a soil cover
- Total process materials removal

#### 3.4.3 Revegetation Plan

The 1995 Mine Plan of Operations defines Cyprus Tohono's requirements for revegetation of disturbed lands at the mining site. Section 4.0 of that document states that Cyprus Tohono must develop a site Landscape Plan which will "mitigate visual impacts of disturbances created by the mining process". To produce this document for the Evaporation Pond area, Cyprus Tohono will review existing revegetation information that has been developed in the Agreement as well as the analysis of the current on-site revegetation test program. The results of recently performed native vegetation species counts in the Evaporation Pond area are also available. In general, the area to be revegetated is a creosote flat with a small population of ironwood and palo verde trees, triangular leaf bursage, and saguaro cactus. The area has traditionally been open to heavy grazing by range cattle and horses which has limited the establishment of grasses and other similar vegetation.

The information from the revegetation program will be assembled into a document that incorporates the results of the recommended grading and cover plans into a cohesive, constructable remediation site plan that meets the objectives of the Reclamation Plan.

Additional important components of the Revegetation Plan will include soil amendment specifications, seed mix, method of seeding (i.e. hydromulching, drill seeding, broadcast seeding), transplantation, and supplemental watering.

#### 3.5 SELECTION AND FINAL DESIGN OF RECLAMATION PLAN

Upon review of the prioritized reclamation plan options, Cyprus Tohono will select a final Reclamation Plan for final design work at the site. During this phase of the project, channel grades and alignments will be finalized, regrading cut and fill isopachs will be generated to estimate quantities of earthwork, and the proposed cover section will be designed in accordance with the developed Cover and Revegetation Plans.

#### 3.6 COMPLETION OF SEP

Within 180 days of the Entry of the Consent Decree, Cyprus Tohono will submit the Reclamation Plan for the Evaporation Ponds to the USEPA. Upon submittal of this technical report, Cyprus Tohono will include notification that this action item of the SEP, as listed on the Consent Decree Section III, Paragraph 8, is complete. Appropriate supporting documentation will be included in the submittal.

#### 4.0 EVAPORATION POND ACCESS CONTROL

Section III, Paragraph 8 of the Consent Decree identifies Cyprus Tohono's obligations for the construction of a physical means of controlling access to the Evaporation Ponds as an action item for certain work regarding the Evaporation Ponds.

#### 4.1 DESIGN REVIEW & ENGINEERING QUOTES

Upon entry of the Consent Decree, Cyprus Tohono will proceed to design, or have designed, a means of controlling access to the Evaporation Ponds. Cyprus Tohono understands that the definition of "access control" in this context means that the intent is to locate the perimeter of the Evaporation Pond area with a fence and to post signs on the fence that would warn people using the nearby area of the potential hazards. Also, Cyprus Tohono understands that the fence would be constructed to exclude livestock from the Evaporation Pond area. This fence may be a gated, four-strand barbwire fence or a fence of similar design. Upon completion of the fence engineering and design layout, Cyprus Tohono will issue to manufacturer and/or vendors a Request for Quotation (RFQ) to obtain the best possible pricing for construction of the designed fence.

#### 4.2 COMPLETION OF SEP

Upon review of the prioritized access control options, Cyprus Tohono will implement the installation of the access control at the Evaporation Ponds. Upon completion of the installation project, Cyprus Tohono will submit a notification to the EPA that the access control of the Evaporation Ponds has been completed. This notification will state that Cyprus Tohono has completed their obligations as defined in Section III, Paragraph 8 of the Consent Decree and that the SEP is complete.

#### 4.3 SEP SCHEDULE

Section III, Paragraph 8 of the Consent Decree identifies Cyprus Tohono's obligations for completion of the installation of access control at the Evaporation Ponds. Cyprus Tohono will complete implementation of the access control within the 180-day period specified for the completion of the RP submittal.

#### 5.0 EVAPORATION POND FUGITIVE DUST CONTROL

Section III, Paragraph 8 of the Consent Decree identifies Cyprus Tohono's obligations for the control of fugitive dusts from the Evaporation Ponds as an action item for certain work regarding the Evaporation Ponds.

#### 5.1 DESIGN REVIEW & ENGINEERING QUOTES

Upon entry of the Consent Decree, Cyprus Tohono will proceed to design, or have designed, a means of controlling fugitive dusts that may originate from the Evaporation Ponds during periods of high winds in the area of the minesite. This dust control project is considered to be a temporary, or interim, dust control project that will perform effectively until completion of the Evaporation Pond RP and the implementation of the designed RP for pond closure.

These interim dust control measures may consist of frequent water spray applications, the application(s) of chemical dust suppressants, the installation of cover soils or rock layer(s), or other appropriate methods. In order to minimize waste of assets, Cyprus Tohono will review the potential for the interim control measures to be useful in a final RP closure design. Upon review of the various dust control options or designs, Cyprus Tohono will issue to appropriate contractors and/or vendors a Request for Quotation (RFQ) to obtain the best possible pricing for application or installation of dust control measures.

#### 5.2 COMPLETION OF SEP

Upon review of the prioritized dust control options, Cyprus Tohono will implement the installation of the dust control measures at the Evaporation Ponds. Upon completion of the installation project, Cyprus Tohono will submit a notification to EPA that the dust control action item of the SEP has been completed. This notification will state that Cyprus Tohono has completed their obligations as defined in Section III of the Consent Decree and that the SEP is complete.

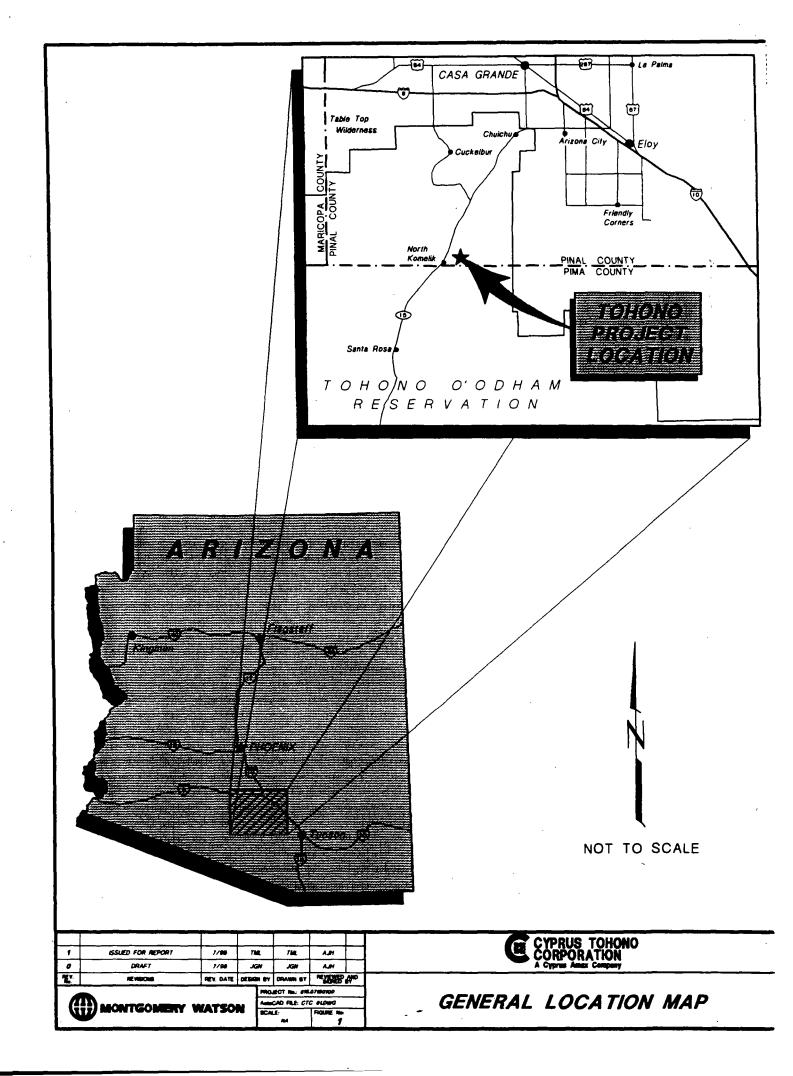
#### 5.3 SEP SCHEDULE

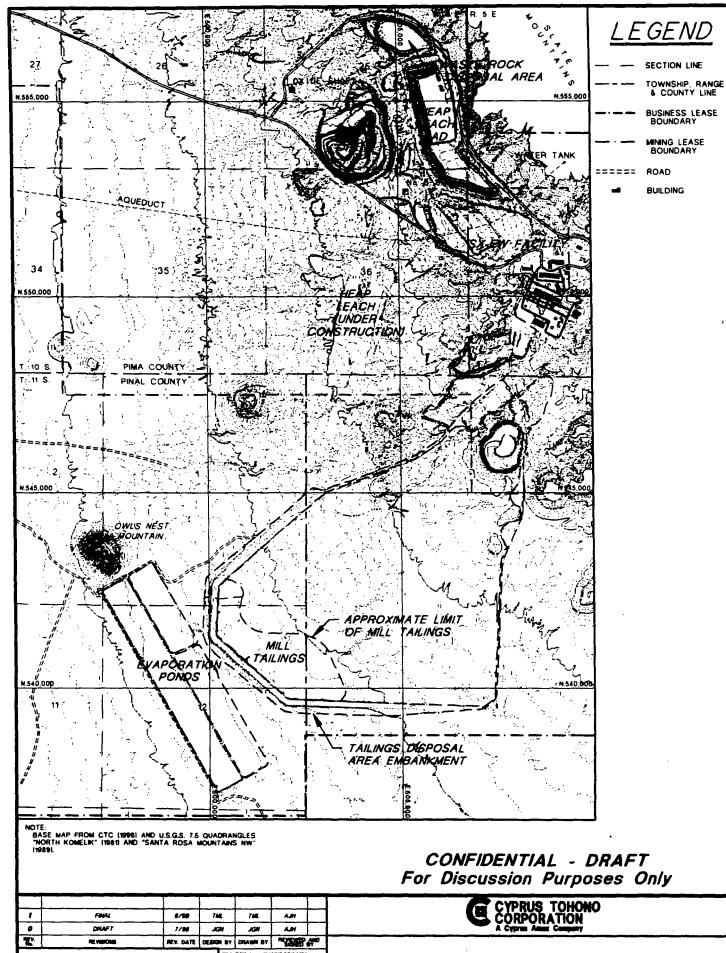
Section III, Paragraph 8 of the Consent Decree specifies Cyprus Tohono's obligation for completion of the installation of fugitive dust control at the Evaporation Ponds. Cyprus Tohono will complete implementation of the dust control program within the 180-day period specified for the completion of the RP submittal.

# 6.0 REFERENCES

Cyprus Tohono Corporation, 1995, Mine Plan of Operations for Expanded Open Pit and Heap Leach Operation, Internal Document, dated March.

Woodward-Clyde Consultants, 1995, Cyprus Tohono Corporation, Proposed Mine Expansion, Final Environmental Impact Statement, dated April.





MONTGOMERY WATSON

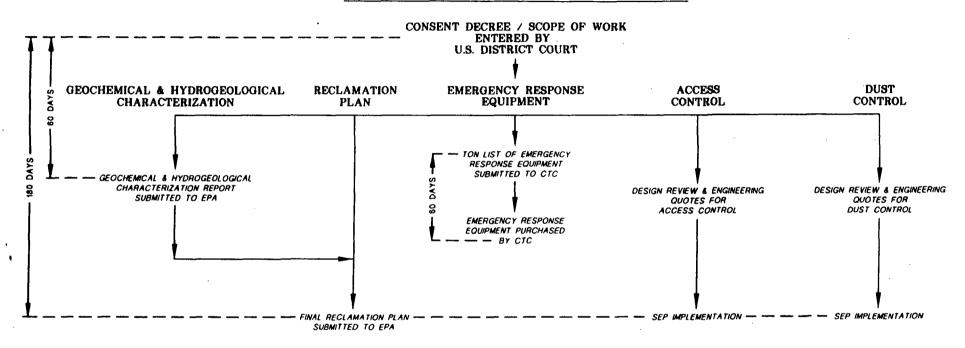
MOJECT No. DIAPRIOPINATE

AMECAD FILE CTC REDWG

SCALE: FROME No.
2

SITE MAP

# TOHONO CONSENT DECREE SUPPLEMENTAL ENVIRONMENTAL PROJECTS



## CONFIDENTIAL - DRAFT For Discussion Purposes Only

| 10  | FRAL<br>DRAFT | 8/99 | A.H<br>A.H | TML      | A.SH<br>A.SH                                     |                | CYPRUS TOHONO CORPORATION A CYPRUS AMERICAN |  |
|---|---------------|------|------------|----------|--|----------------|---|--|
| 75.   | REVISIONS     | DATE | DEGION (   | DRAWN 6Y | PE YEAR  | ₩ <sub>D</sub> | COURSE FOR OURSE CHENTA                     |  |
| MONTGOMERY WATSON  PROJECT No. ESJANK STROKO AMOGAD FILE: CTC OSCILLING BCALE: FIGURE No. |               |      | C 09CaDWG  |          | SCHEDULE FOR SUPPLEMENTAL ENVIRONMENTAL PROJECTS |                |   |  |